PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

ADDITIONS TO THE ORCHID FLORA OF FLORIDA.

BY OAKES AMES.

The orchid floras of peninsular Florida and of the West Indies are so similar in the genera and species common to both that it is not surprising to find, among recent additions to the list of Florida orchids, species known to be natives of Cuba, Porto Rico, During November and December, 1903, six and Jamaica. genera new to Florida, including seven species, were discovered by a single collector in Dade County. Most of these were found in abundance and, as careful comparisons showed, were identical with genera and species known to come from Cuba and Jamaica. One species proved new to science, but in February. 1904, was discovered by myself in the Province of Pinar del Rio. near the town of Artemisa, forty miles west of Havana. March, 1904, while on the west coast of Florida about eighty miles from the end of the Peninsula, I found among other orchids three species up to that time unrecorded from the United States, one of them belonging to a genus new to Florida. Of all of them I had collected specimens previously in different parts of Cuba, one frequently in Pinar del Rio province. At the present time, with the exception of Epidendrum tampense Lindl, and E. conopseum R. Br., there is no epiphytic orchid known to occur in Florida which has not also been reported from Cuba and other parts of Tropical America, while the same may be said of many of the terrestrial species; a fact which

shows quite plainly that the West Indies must be reckoned with to a large extent in the study of our semi-tropical orchid flora.

The following list contains six species hitherto unrecorded as natives of the United States. Two of them, however, on account of inadequate material are here reported on provisional, though reasonably sure, determinations. One, *Liparis elata*, was received in 1903 from Lee County, Florida, where it was collected by the late James E. Layne. No data accompanied the specimens, which were in a fresh state, one of them pushing up a flower shoot that failed to reach maturity. The other species, *Pelexia setacea*, was collected by Mr. A. A. Eaton in Dade County. When received, Mr. Eaton's plants were partly frozen so that the flowers ceased developing. From the buds, however, analyses were made that showed characters on which the following determination is based. Of the remaining species, three were collected by me on the west coast of Florida and one by Mr. Eaton near Miami, on the east coast.

Ionopsis utricularioides Lindl.

On low trees near pools of water. Found only in "Gobbler's Head," near Naples, Lee County, the flowers just opening. March 12 (O. A.).

Epidendrum strobiliferum Rehb. f.

On the lower limbs of *Persea carolinensis* Nees., in "Palm Hammock," near Marco. Only one station; the plants in fruit. March 19 (O. A.).

Epidendrum anceps Jacq.

Common on deciduous trees, almost everywhere, not infrequently forming the main epiphytic orchid flora round muddy "lakes" in cypress swamps; Lee County, March 15–21 (O. A.).

Pelexia setacea Lindl.

In humus, in the dense shade of hammocks, fourteen miles south of Cutler, Dade County, Dec. 10, 1903 (A. A. Eaton). My specimens agree perfectly with *P. setacea*, except for the spur, but the immaturity of my material may well account for discrepancies in this respect, as the spur must lengthen considerably as the flower develops.

Liparis elata Rchb, f.

Lee County, July, 1903 (J. E. Layne).

Sauroglossum cranichoides n. comb.

(Pelexia cranichoides Grisebach, Cat. Plant. Cubensium, 1866, p. 269; Spiranthes storeri Chapman, Flora of the Southern United States, 1897, p. 488; Beadlea storeri Small, Flora of the Southeastern United States, 1903, p. 319.)—In humus in the deep shade of Breckell Hammock, near Miami, Dade County, Dec. 23-28, 1903 (A. A. Eaton). This is undoubtedly the species described by A. W. Chapman as Spiranthes storeri in 1897, and later placed by Dr. J. K. Small in a new genus as Beadlea storeri. Tracings of the floral organs and of the plant taken from the type material of Beadlea in the herbarium of the New York Botanical Gardens, agree perfectly with the specimens collected by Mr. Eaton and with Pelexia cranichoides Grisebach. Dr. Small described *Beadlea* as without callosities at the base of the lip, but this was an oversight, as later investigations showed the presence of two callosities, much the same as in Spiranthes. In referring the species in question to Pelexia, A. H. R. Grisebach must have interpreted the characters of that genus rather loosely, as the flowers on the plants which he described lack the characteristic spur of *Pelexia* and do not agree with it in several other important respects. The nearest affinity of Sauroglossum cranichoides seems to be S. elatum (Rich.). From both species Sauroglossum elatum Lindl, is distinct, so that it seems best to revive the first specific name of this plant, which would eliminate the likelihood of confusion and give as a new combination Sauroglossum nitidum (Vell).